



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,246	08/31/2005	Gerd Mossakowski	102132-23	5062
27388 7590 10/16/2007 NORRIS, MCLAUGHLIN & MARCUS 875 THIRD AVE 18TH FLOOR NEW YORK, NY 10022			EXAMINER ABDELNOUR, AHMED F	
			ART UNIT	PAPER NUMBER
			2624	
			MAIL DATE	DELIVERY MODE
			10/16/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/520,246	<b>Applicant(s)</b> MOSSAKOWSKI, GERD	
	<b>Examiner</b> Farras Abdelnour	<b>Art Unit</b> 2624	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>April 18, 2005</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 102 30 812.8, filed on July 8, 2002, Germany.

### ***Specification***

2. The incorporation of essential material in the specification by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).

### ***Claim Rejections - 35 USC §.112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 3-9 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 2, 5, and 7-9 rejected under 35 U.S.C. 102(e) as being anticipated by Christopoulos *et al.*, US 6961754 B2 ("Interactive access, manipulation, sharing and exchange of multimedia data").

Regarding Claim 1, Christopoulos *et al.* discloses a method for transmitting additional information (Consult Fig. 7) when using a method for compressing data ("The image is then compressed, for example, using the JPE2000 standard, as shown in step 603," column 12, line 59) by way of a prioritizing pixel transmission ("In accordance with exemplary embodiments of the present invention, an IAS may now be employed to prioritize and/or limit the number of ROIs that were selected by U<sub>A</sub>," column 11, 36),

wherein the data comprise individual pixel groups, with each pixel group having a position value within an image array and at least one pixel value ("FIG. 5 illustrates the steps associated with a first scenario, where a media object (e.g., a still image) is transferred directly from  $U_A$  to  $U_B$ , along with a number of ROIs from the image which  $U_A$  has selected," column 11, line 22), wherein the minimal size of the image array is defined by the height  $h$  and the width  $b$  of an image, expressed in pixels, wherein in the transmission of the additional information position values are used that do not occur in the actual data, but are located instead outside the range of the image array ("The block labeled "CONTENT DESCRIPTIONS" represents the descriptions, i.e., meta-data associated with the various media objects stored in the content storage block. The content descriptions block might contain, for example, MPEG-7 descriptions or JPEG2000 descriptions," column 8, line 25).

Regarding Claim 2, Christopoulos *et al.* discloses a method according to claim 1, wherein the additional information has a position value of height  $h$  x width  $b$  of the image array + $k$  ("where the significance values and the terminal B capability information may be included as metadata, as for example, in the MPEG-7 standard," column 12, line 64).

Regarding Claim 5, Christopoulos *et al.* discloses a method according to claim 1, wherein the additional information is identified as being associated with a certain document format ("The block labeled "CONTENT DESCRIPTIONS" represents one or

more databases that contain descriptive information about the stored multimedia objects, such as MPEG descriptions associated with the video objects, or JPEG descriptions associated with the still image objects,” column 7, line 51).

Regarding Claim 7, Christopoulos *et al.* discloses a method according to claim 1, wherein priorities are assigned to the additional information depending on its content-related relevance, its temporal relevance or its device-dependent relevance (“In step 611, the transcoder extracts from the bitstream the location of and corresponding significance value of each ROI. The transcoder may, at this point, employ an IAS to prioritize and/or limit the image data based on the previously defined user preference information (e.g., the significance value information associated with each ROI), as well as any user preference information associated with  $U_B$ , and capability information associated with terminal B,” column 13, line 3).

Regarding Claim 8, Christopoulos *et al.* discloses a method according to claim 1, wherein the additional information is transmitted in descending order of its priority (“The transcoder may, at this point, employ an IAS to prioritize and/or limit the image data based on the previously defined user preference information (e.g., the significance value information associated with each ROI), as well as any user preference information associated with  $U_B$ ,” column 13, line 5).

Regarding Claim 9, Christopoulos *et al.* discloses a method according to claim 1, wherein the additional information is recognized in the receiver based on its specific position values ("In accordance with step 612, the transcoder may then employ a TSS, which relies on the user preference information and the terminal and/or network capability information associated with terminal B to transcode the image data. As one skilled in the art will understand, the transcoding process may proceed in accordance with the JPEG2000 standard, where, for example, the transcoder derives a set of ROI coefficients (i.e., an ROI mask)," column 13, line 15. Also see "At terminal B, the image data is received, as indicated by step 620. Terminal B then decodes the image data in accordance with the JPEG2000 standard, or other applicable decompression method, and the decoded image is displayed for U<sub>B</sub>, as shown in steps 621 and 622, respectively," column 13, line 32).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3 and 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Christopoulos *et al.* as applied to claim 1 above, and further in view of Xie *et al.* ("Feature representation and compression for content-based retrieval," H. Xie and A. Ortega, Proc. Vol. SPIE 4310, pages 111-122 (2000)).

Regarding Claim 3, Christopoulos *et al.* discloses data transmission with prioritized image components with additional information in metadata format.

Christopoulos *et al.* does not explicitly specify image textures as transmitted additional information. Xie *et al.* teaches a method wherein the additional information is transmitted in the form of textures. ("various feature sets (color, texture, shape, motion, etc.) are extracted to represent the content information of images/videos and stored as metadata in some content-based retrieval systems," page 112, second paragraph).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to apply Xie *et al.* method of incorporating image texture information in metadata to Christopoulos *et al.* method of transmitting images encoded with metadata prioritization information for the purpose of allowing different kinds of queries and faster and more efficient as well as more relevant information retrieval.

Regarding Claim 4, Christopoulos *et al.* discloses data transmission with prioritized image components with additional information in metadata format.

Christopoulos *et al.* does not explicitly specify transmitting the metadata information in compressed form. Xie *et al.* teaches a method according to claim 1 wherein the additional information is provided and transmitted in compressed form ("Wavelet based texture classification is performed with JPEG and SPIHT compressed images as well as with explicitly stored features (in compressed format)," page 118, section 4.1).



It would have been obvious at the time the invention was made to one of ordinary skill in the art to apply Xie *et al.* method of transmitting compressed metadata to Christopoulos *et al.* method of transmitting images encoded with metadata prioritization information for the purpose of supplying main features and information of the image while avoiding excessive overhead data and allowing reduced transmission bandwidth as well as reduced storage requirements.

9. Claim 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Christopoulos as applied to claim 1 above, and further in view of Suzuki *et al.* US 6097842 ("Picture encoding and/or decoding apparatus and method for providing scalability of a video object whose position changes with time and a recording medium having the same recorded thereon").

Regarding Claim 6, Christopoulos *et al.* discloses data transmission with prioritized image components with additional information in metadata format.

Christopoulos *et al.* does not explicitly specify including texture properties and additional information in a header. Suzuki *et al.* teach header information method wherein the additional information comprises a header that includes the properties of the texture and optionally one or more of fields of document format of the texture, position of the texture in the image/video array, size of the texture in the array, number of bytes required for transmission, part of the total texture, if the total texture must be subdivided into several parts due to its size and additional fields for additional use

(Consult Figures 35-37 for various features which can be specified through Video Object Layer).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to apply Suzuki *et al.* method of incorporating metadata information in header to Christopoulos *et al.* method of transmitting images encoded with metadata prioritization information for the purpose of efficient decoding and reconstruction of transmitted data.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farras Abdelnour whose telephone number is 571-270-1806. The examiner can normally be reached on Mon. - Thurs. 7:30 - 17:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian P. Werner can be reached on 571-272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Farras Abdelnour  
Examiner  
Art Unit 2624

FA

WENPENG CHEN  
PRIMARY EXAMINER

  
12/18/07